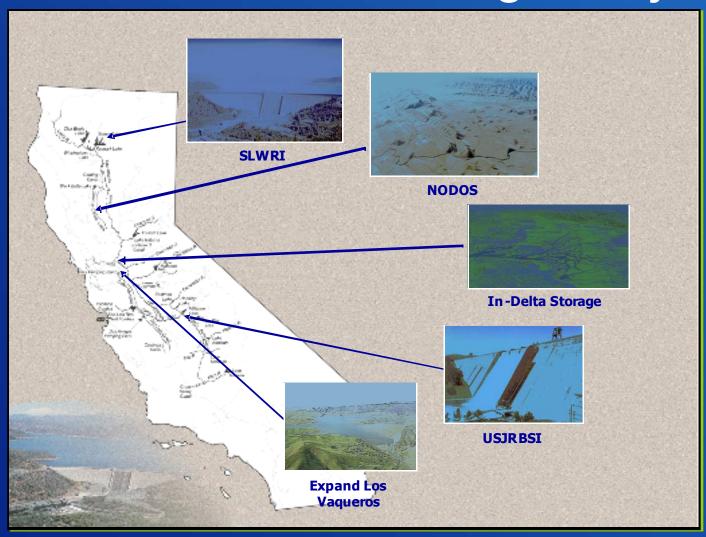
## RECLAMATION Managing Water in the West

## CALFED Surface Storage Program

Water Management Science Board Wednesday, January 26, 2005

## CALFED Surface Storage Projects



## What is a Feasibility Study?

 "Any report of the scope required by the Congress when formally considering authorization of the project of which the report treats."

Federal Water Project Recreation Act of 1965

#### RECLAMA

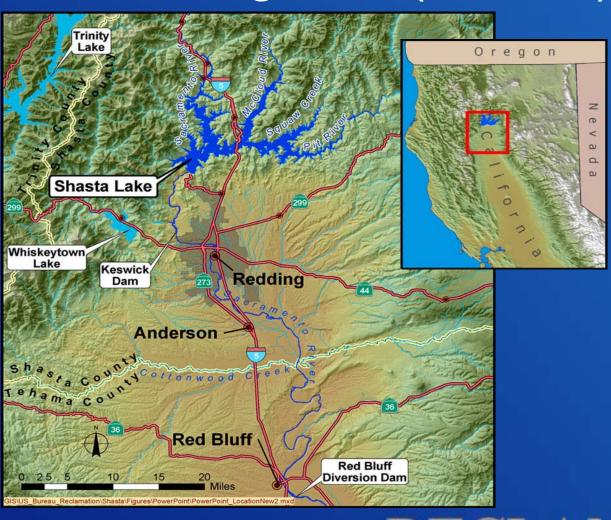
## What is a Feasibility Study?

- Entails detailed analysis to examine a situation and determine if a workable solution can be developed and implemented
- Identifies the project beneficiaries; financing; impacts and trade-offs, environmental compliance, and basis for compliance with CWA 404
- Submitted to Congress (thru OMB) for approval and appropriations

## Planning is the EIS...

Planning Process:	EIS Process:
Problems and Opportunities	Purpose of and Need for Action
Inventory and Forecast	Affected Environment
Formulation	Alternatives Including Proposed Action
Evaluation	Environmental Consequences
Comparison	Alternatives Including Proposed Action
Selection	Record of Decision

# Shasta Lake Water Resources Investigation (SLWRI)



## SLWRI Study Objectives

- CALFED ROD Commitment
  - Expand CVP Storage in Shasta Lake by approximately 300 TAF
- Planning Objectives
  - Anadromous fish survival
  - Water supply reliability
- Additional Opportunities
  - Ecosystem restoration
  - Flood Damage reduction
  - Hydropower generation

#### **SLWRI Status**

- Background
  - Shasta Dam & ReservoirConstructed

1938/1945

- Feasibility Study Authorized (PL 96-375) 1980
- Reinitiated Feasibility Study

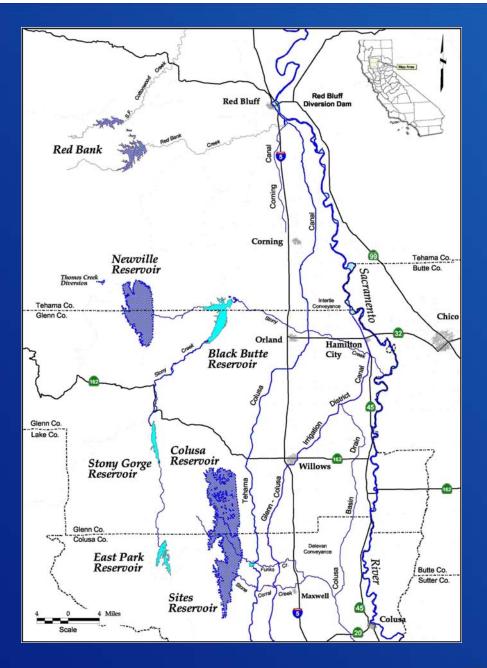
2000

Federal Role

Reclamation - Feasibility Study & NEPA

Non-Federal Role

**DWR** - Engineering and Economics



## North of Delta Offstream Storage (NODOS)

Sites Reservoir

## NODOS Study Objectives

- CALFED ROD Commitment
  - Examine Sites Reservoir (up to 1.8 MAF)
- Planning Objectives
  - Improve Sacramento River flows during critical fish migration periods and restore riparian habitat
  - Improve water supply reliability in the Sacramento Valley, CVP and SWP
  - Improve Delta water quality
- Additional Opportunities
  - Provide for long-term EWA supply storage
  - Provide Level 4 Refuge Water Supplies

#### **NODOS Status**

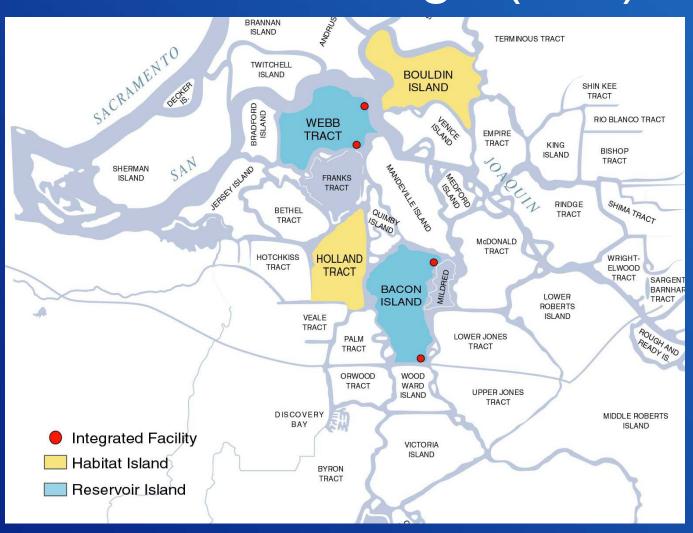
- Background
  - Studied by both DWR and Reclamation previously
  - Feasibility Study authorized (PL 108-7) 2003
- Federal Role

Reclamation - NEPA & Feasibility Study

Non-Federal Role

**DWR - CEQA** 

## In-Delta Storage (IDS)



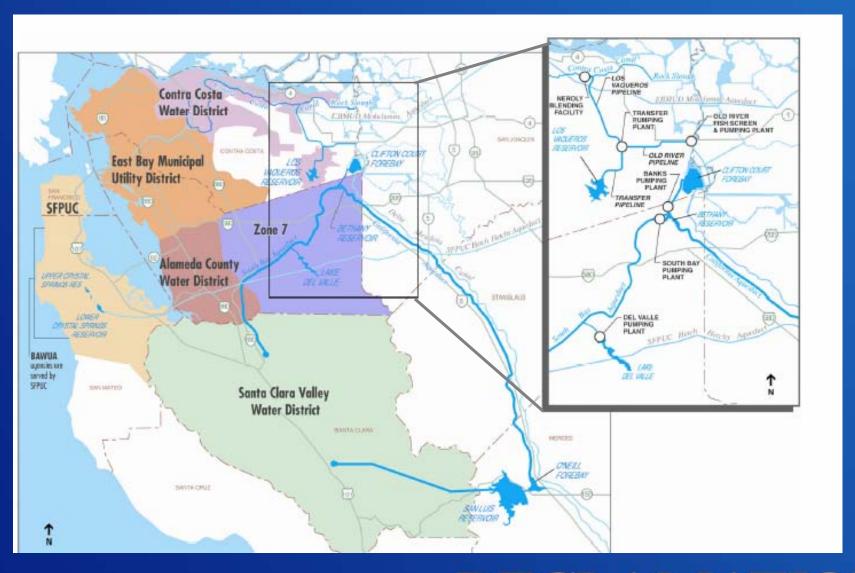
## **IDS Study Objectives**

- CALFED ROD Commitment
  - Provide 217 TAF of water at Webb Tract and Bacon Island
  - Develop habitat at Holland Tract and Bouldin Island for loss of habitat and add habitat values to the Delta environment.
- Planning Objectives
  - Provide both fishery benefits
  - Provide enhanced water project flexibility

#### **IDS Status**

- Background
  - Initially proposed as Delta Wetlands
  - Draft State Feasibility Study Feb 2004
  - Recent Jones Tract flooding information to be used in future evaluations
- Reclamation Role
  - Completed Appraisal study
  - No Feasibility Study authority
  - Lending technical assistance to DWR
- Non-Federal Role
  - DWR CEQA and State Feasibility Engineering Study

## Los Vaqueros Expansion Study (LVE)



## LVE Study Objectives

- CALFED ROD Commitment
  - Expand LV Reservoir by up to 400 TAF
  - Bay Area water quality and water supply reliability initiative
- Planning Objectives
  - Improve Bay Area water quality and supply reliability
  - Provide Delta fish protection
- Additional Opportunities
  - Enhance/increase existing recreation at the reservoir
  - Flood control improvements, hydroelectric generation, reservoir watershed habitat improvements

#### LVE Status

- Background
  - Los Vaqueros Dam & Reservoir constructed
     by Contra Costa Water District (CCWD) 1998
  - March 2004 advisory vote approval from CCWD Ratepayers
- Federal Role Reclamation NEPA Lead & Feasibility Study
- Non-Federal Roles

**DWR & CCWD - CEQA** 



Upper San
Joaquin River
Basin Study
Investigation
(USJRBSI)

## USJRBSI Study Objectives

- ROD Commitment
  - Investigate 250-700 TAF of additional storage in the upper San Joaquin River watershed
- Planning Objectives
  - Restoration of and improve water quality for the San Joaquin River
  - Improve M&I water quality deliveries south of the Delta
- Additional Opportunities
  - Improve CVP water supply reliability south of the Delta
  - Increase flood protection in the San Joaquin Valley
  - Increase power generation

#### **USJRBSI** Status

- Background
  - Construction of Friant Dam1935 1942
  - Feasibility Study Authorized (PL 108-7)
  - Phase 1 Report (appraisal-level)October 2003
- Federal Role

Reclamation - Feasibility Study & NEPA

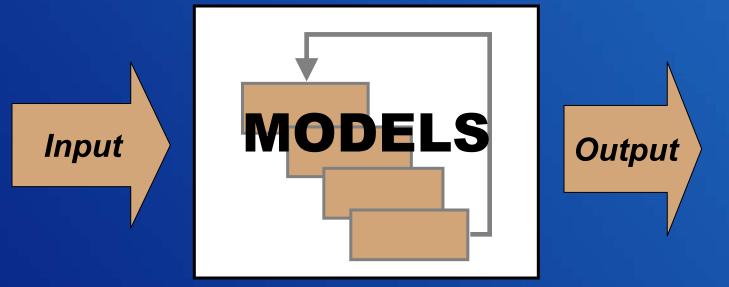
Non-Federal Role

DWR -CEQA

## Common Assumptions Effort Objectives

Develop set of *common* tools (models).

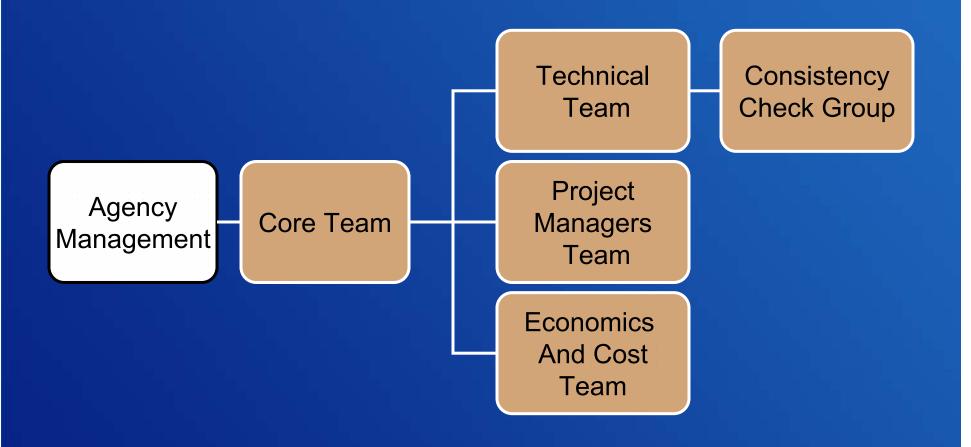
Develop steps to use *common* tools. Check for consistency of usage.



Develop set of *common* inputs.

Develop set of *common* reporting metrics.

## Common Assumptions Teams



## Team Roles & Responsibilities

#### Agency Management

Determine
Demarcation Between
Ex. Conditions
& Future Conditions

Develop Criteria For inclusion in Future Conditions

Provide Guidance on Environmental Documents & Permitting Strategies

Provide Implementation Decisions

#### Project Study Teams

Develop Scenarios and Analyze Performance

Develop Alternatives and Analyze Performance

Complete Feasibility
Studies,
Environmental Docs &
Permitting

Implement Projects

#### Common Assumptions Teams

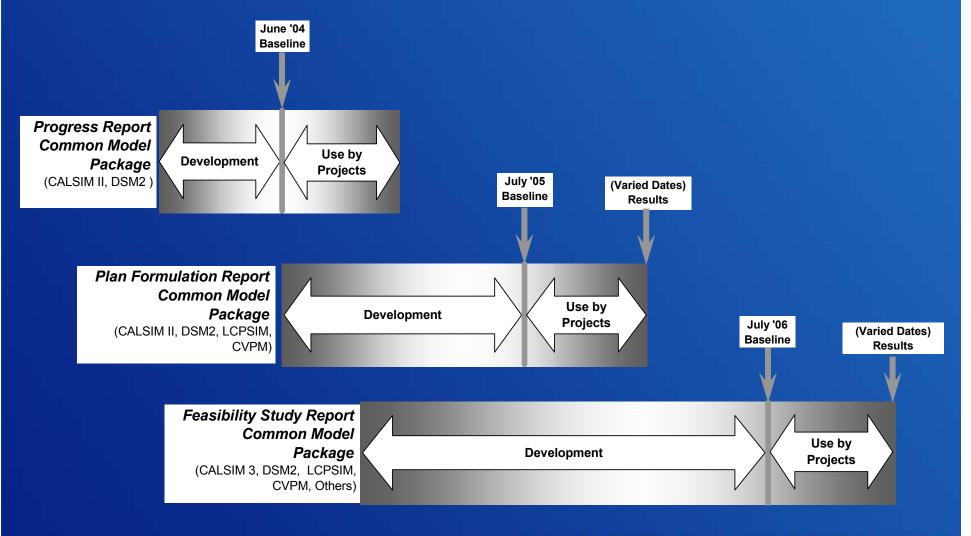
Distribute Interim
CALSIM II
& Refined Baselines

Develop Consistent Reporting Metrics and Quantify other Water Management Options

Refine Baselines for Models, Ex. Conditions Future No-Action, Alternative Future & Cumulative Impacts

Coordinate Economic & Cost Analyses

## Common Model Packages



#### Surface Storage Program

Project	Contacts
SLWRI	DWR – Waiman Yip 916-651-9280
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USJRBSI	DWR – Waiman Yip 916-651-9280
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Common	DWR – Steve Roberts 916-651-9249
Assumptions	Reclamation – Nannette Engelbrite 916-978-5073
	Authority – Mark Roberson 916-207-9834